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EXAMINER	
DESIR, PIERRE LOUIS	
ART UNIT	**PAPER NUMBER**
2681	

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/667,027	THOMSON ET AL.	
	Examiner	Art Unit	
	Pierre-Louis Desir	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 48 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 47 recites the limitation "the method of claim 37" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Note: for the process of examination, "the method of claim 37" will be interpreted as "the method of claim 47."

Claim 58 recites the limitation "the method of claim 53 wherein the 802.11 settings" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Note: for the process of examination, "the method of claim 53 wherein the 802.11 settings" will be interpreted as "the method of claim 57 wherein the 802.11 settings."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted

on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-24, 26-48, 52, and 55-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Rappaport et al. (Rappaport), Pub. No. US 2004025955.

Regarding claim 1, Rappaport discloses a method of planning a wireless local area network (see abstract), comprising: receiving floor plan data about a site for the wireless local area network (i.e., In order to begin analyzing a communication network, a site-specific computer representation of the environment in which the communication network is or will be deployed is created 101. The present invention uses 2-D or 3-D computer aided design (CAD) renditions of a part of a building, a building, or a collection of buildings and/or surrounding terrain and foliage) (see fig. 1, paragraph 55); receiving coverage data about the site for the wireless local area network (i.e., the placement of components can be refined and fine-tuned prior to actual implementation of a system or network, wherein performance prediction modeling or measurement may be used for design and deployment; and to ensure that all required regions of the desired service area are blanketed with adequate connectivity, RF coverage, data throughput) (see paragraph 37); receiving capacity data about the site for the wireless local area network (i.e., the designer may use the invention to perform calculations to predict the performance of the communications network modeled within the environment. Performance is defined by any form of measurable criteria and includes, but is not limited to, adequate connectivity, RF coverage, **data throughput**) (see paragraph 40); and based at least on the floor plan data, the coverage data, and the capacity data, determining quantity, placement, and configuration of a plurality of access points of the wireless local

area network (i.e., decisions must be made with respect to the proper location and quantity of access points, and their proper channel assignments) (see paragraph 11).

Regarding claim 2, Rappaport discloses a method (see claim 1 rejection) wherein the floor plan data is imported (i.e., a 2-D or 3-D site-specific model of the physical environment is stored as a CAD model in an electronic database) (see paragraph 38).

Regarding claim 3, Rappaport discloses a method (see claim 1 rejection) wherein the floor plan data is manually drawn via computer (i.e., at any point in time, the combined environmental and infrastructure model may be retrieved from the computer media, displayed or processed in a site-specific manner with actual locations of components and component interconnections shown within the environment on a computer monitor, printer, or other computer output device, and/or edited using a computer mouse, keyboard or other computer input device) (see paragraphs 65-66).

Regarding claim 4, Rappaport discloses a method (see claim 1 rejection) wherein objects in the floor plan data are associated with radio frequency attenuation factors (i.e., for wireless communication system design, the relevant information for each obstruction includes but is not limited to: material composition, size, position, surface roughness, attenuation, reflectivity, absorption, and scattering coefficient. For example, outside walls 204 may be given a 10 dB attenuation loss) (see paragraph 56).

Regarding claim 5, Rappaport discloses a method (see claim 4 rejection) wherein objects in the floor plan data are associated with radio frequency attenuation factors that depend on a technology standard of the wireless local area network (see paragraphs 56 and 90).

Regarding claim 6, Rappaport discloses a method (see claim 1 rejection) wherein the coverage data indicates coverage areas of the site serviced by the plurality of access points (i.e., using this a priori prediction capability in order to build look up table based on the site-specific predictions, or based on in-situ measurements, to provide network performance predictions, including position location, network throughput performance throughout the environment, and predicting outage, BER, PER, FER, and other important metrics over areas of interest (see paragraphs 11 and 30).

Regarding claim 7, Rappaport discloses a method (see claim 6 rejection) wherein the coverage data is indicated with at least the floor plan data (i.e., the various physical objects within the environment such as external walls 204, internal walls 201, cubicle walls 202, and windows 203 are represented within the model. Although a single floor of one building is shown for simplicity, any number of multi-floored buildings (or portions thereof) and the surrounding terrain may be represented within the invention. Many forms of obstruction or clutter that could impact or alter the performance or physical layout of a communications network can be represented within the present invention (see fig. 2, paragraph 56).

Regarding claim 8, Rappaport discloses a method (see claim 6 rejection) wherein the coverage data depends on a technology standard of the wireless local area network (i.e., wireless standard) (see abstract and paragraph 90).

Regarding claim 9, Rappaport discloses a method (see claim 8 rejection) wherein at least one coverage area supports one or more technology standards of the wireless local area network (see abstract and paragraph 90).

Regarding claim 10, Rappaport discloses a method (see claim 1 rejection) further comprising: receiving wiring closet data, the wiring closet data indicating one or more locations for one or more distribution system switches at the site for the wireless local area network, the one or more distribution system switches to the plurality of access points (i.e., the placement and configuration of wireless and wired equipment, such as routers, hubs, switches, cell sites, cables, antennas, distribution networks, receivers, transceivers, transmitters, repeaters, access points, or RF ID tag readers is critical from both a cost and performance standpoint. The design engineer must predict how much interference can be expected from other wireless systems and where it will manifest itself within the environment. In many cases, the wireless network interferes with itself, forcing the designer to carefully analyze many different equipment configurations in order to achieve proper performance. In addition, he placement of infrastructure equipment may include cables, routers, antennas, switches, access points, and the like, which would be required for a distributed network of components in a physical system. Important information associated with some or all pieces of infrastructure equipment that are modeled by and maintained within the invention using the described database format includes physical location (placement of the equipment within the database so as to site-specifically represent its actual physical placement) (see paragraphs 11 and 68).

Regarding claim 11, Rappaport discloses a method (see claim 10 rejection) wherein determining quantity, placement, and configuration of the plurality of access points of the wireless local area network is further based at least on the wiring closet data (see paragraphs 11 and 68).

Regarding claim 12, Rappaport discloses a method (see claim 11 rejection)

wherein the wiring closet data includes redundant connection data to the plurality of access points (see paragraphs 11 and 68).

Regarding claim 13, Rappaport discloses a method (see claim 1 rejection) further comprising: based at least on the floor plan data, the coverage data, and the capacity data, determining at least one of quantity, placement, and configuration of one or more distribution system switches at the site for the wireless local area network, the one or more distribution system switches connecting to the plurality of access points (i.e., the placement and configuration of wireless and wired equipment, such as routers, hubs, switches, cell sites, cables, antennas, distribution networks, receivers, transceivers, transmitters, repeaters, access points, or RF ID tag readers is critical from a performance standpoint. the design engineer must predict how much interference can be expected from other wireless systems and where it will manifest itself within the environment. In many cases, the wireless network interferes with itself, forcing the designer to carefully analyze many different equipment configurations in order to achieve proper performance. Sometimes power cabling is only available at limited places in a building or campus, thus decisions must be made with respect to the proper location and quantity of access points, and their proper channel assignments) (see paragraphs 11 and 37).

Regarding claim 14, Rappaport discloses a method (see claim 13 rejection) further comprising: determining connections between the one or more distribution system switches and the plurality of access points (i.e., once the appropriate site-specific model of the environment has been specified 101, any desired number of hardware components, communications infrastructure, mobile or portable or fixed wireless devices, or

equipment can be positioned, configured, and interconnected in the site-specific model 102) (see figs. 1-2, paragraph 60).

Regarding claim 15, Rappaport discloses a method (see claim 1 rejection) wherein the capacity data includes one or more throughput rates for stations serviced by the plurality of access points (i.e., providing network performance predictions, including position location, network throughput performance throughout the environment) (see paragraph 30).

Regarding claim 16, Rappaport discloses a method (see claim 1 rejection) wherein the capacity data includes one or more average desired association rates for stations serviced by the plurality of access points (i.e., if a desirable network performance characteristic is specified, whether by the user or other mean, to be a certain throughput level (e.g., 11 Mbps), the present invention will search for and identify the point or set of points within the site-specific model at which the desired boundary condition or performance goal exists or is most closely matched by predictions and subsequent table lookups) (see paragraph 73).

Regarding claim 17, Rappaport discloses a method (see claim 1 rejection) wherein the capacity data includes one or more quantities of stations serviced by the plurality of access points (i.e., the placement and performance of components can be visualized within the invention to ensure that proper portions of the environment are supplied with service, so that users (i.e., mobile stations' users) within the environment may connect directly (with a hardwired connection) or via a wireless or infrared connection which can be provided throughout the wired network using translators, converters, wireless access

points, and other communication components that facilitate frequency translation and wireless access from the wired network) (see paragraph 37).

Regarding claim 18, Rappaport discloses a method (see claim 17 rejection) wherein the capacity data includes one or more quantities of active stations serviced by the plurality of access points (see paragraph 37).

Regarding claim 19, Rappaport discloses a method (see claim 17 rejection) wherein the capacity data includes one or more quantities of total stations serviced by the plurality of access points (see paragraph 37).

Regarding claim 20, Rappaport discloses a method (see claim 1 rejection) further comprising: receiving association data (i.e., decisions must be made with respect to the proper location and quantity of access points, and their proper channel assignments) (see paragraph 11).

Regarding claim 21, Rappaport discloses a method (see claim 20 rejection) wherein determining quantity, placement, and configuration of the plurality of access points of the wireless local area network is further based at least on the association data (see paragraph 11).

Regarding claim 22, Rappaport discloses a method (see claim 20 rejection) wherein the association data includes allowable channels for the plurality of access points (see paragraph 11).

Regarding claim 23, Rappaport discloses a method (see claim 20 rejection) wherein the association data includes one or more minimum rates for beacons of the plurality of access points (i.e., perform calculations to predict the performance of the communications network modeled within the environment. Performance is defined by

any form of measurable criteria and includes, but is not limited to, adequate connectivity, RF coverage, data throughput, or required network system performance values, such as acceptable levels of quality of service (QoS), packet error rate, packet throughput, packet latency, bit error rate, signal-to-noise ratio (SNR), carrier-to-noise ratio (CNR), signal strength or RSSI, desired rms. delay spread, distortion) (see paragraph 40).

Regarding claim 24, Rappaport discloses a method (see claim 20 rejection) wherein the association data includes one or more minimum rates for probe responses of the plurality of access points (i.e., perform calculations to predict the performance of the communications network modeled within the environment. Performance is defined by any form of measurable criteria and includes, but is not limited to, adequate connectivity, RF coverage, data throughput, or required network system performance values, such as acceptable levels of quality of service (QoS), packet error rate, packet throughput, packet latency, bit error rate, signal-to-noise ratio (SNR), carrier-to-noise ratio (CNR), signal strength or RSSI, desired rms. delay spread, distortion) (see paragraph 40).

Regarding claim 26, Rappaport discloses a method (see claim 1 rejection) wherein the configuration of the plurality of access points of the wireless local area network determined based at least on the floor plan data, the coverage data, and the capacity data, includes power levels for the plurality of access points (i.e., power delay profile) (see paragraph 17).

Regarding claim 27, Rappaport discloses a method (see claim 1 rejection) wherein the configuration of the plurality of access points of the wireless local area network determined based at least on the floor plan data, the coverage data, and the capacity data, includes channel assignments for the plurality of access points (i.e., proper channel

assignment) (see paragraph 11).

Regarding claim 28, Rappaport discloses a method (see claim 1 rejection) wherein the placement of the plurality of access points of the wireless local area network determined based at least on the floor plan data, the coverage data, and the capacity data, is manually adjustable via computer (i.e., at any point in time, the combined environmental and infrastructure model may be retrieved from the computer media, displayed or processed in a site-specific manner with actual locations of components and component interconnections shown within the environment on a computer monitor, printer, or other computer output device, and/or edited using a computer mouse, keyboard or other computer input device) (see paragraphs 65-66).

Regarding claim 29, Rappaport discloses a method (see claim 28 rejection) further comprising: based at least on manually adjusted placement of the wireless local area network, determining at least one of the quantity and the configuration of the plurality of access points (see paragraphs 11, and 65-66).

Regarding claim 30, Rappaport discloses a method (see claim 28 rejection) further comprising: based at least on manually adjusted placement of at least one access point of the wireless local area network, determining the placement of at least one other access point of the plurality of access points (see paragraphs 37, and 65-66).

Regarding claim 31, Rappaport discloses a method (see claim 28 rejection) further comprising: based at least on manually adjusted placement of at least one access point of the wireless local area network, determining at least one of the coverage data and the capacity data of the site for the wireless local area network (see paragraphs 37, 65-66).

Regarding claim 32, Rappaport discloses a method (see claim 1 rejection) further

comprising: displaying at least the quantity and the placement of the plurality of access points of the wireless local area network (see paragraphs 65).

Regarding claim 33, Rappaport discloses a method (see claim 1 rejection) further comprising: permitting manual adjustments via computer to one or more of: the quantity and the configuration of the plurality of access points of the wireless local area network.

Regarding claim 34, Rappaport discloses a method (see claim 33 rejection) further comprising: based at least on the manual adjustments, determining at least one of the quantity, the placement, and the configuration of the plurality of access points (see paragraphs 65).

Regarding claim 35, Rappaport discloses a method (see claim 33 rejection) further comprising: based at least on manual adjustments, determining at least one of the coverage data and the capacity data of the site for the wireless local area network (see paragraphs 65).

Regarding claim 36, Rappaport discloses a method (see claim 1 rejection) further comprising: receiving preexisting access point data (i.e., network engineers must determine whether local area coverage will be adequately supplemented by other existing macrocells, or whether and where, particularly, indoor wireless transceivers (such as wireless access points, smart cards, sensors, or picocells) must be added) (see paragraph 9).

Regarding claim 37, Rappaport discloses a method (see claim 36 rejection) wherein determining quantity, placement, and configuration of the plurality of access points of the wireless local area network is further based at least on the preexisting access point data (see paragraphs 9 and 11).

Regarding claim 38, Rappaport discloses a method (see claim 1 rejection) further comprising: generating work order data based at least on the quantity, the placement, and the configuration of the plurality of access points of the wireless local area network.

Regarding claim 39, Rappaport discloses a method (see claim 38 rejection) wherein the work order data (i.e., installation information) includes installation instructions for the plurality of access points of the wireless local area network (see paragraph 68).

Regarding claim 40, Rappaport discloses a method (see claim 39 rejection) wherein the work order data includes installation instructions for one or more distribution system switches connecting to the plurality of access points of the wireless local area network (see paragraphs 11 and 68).

Regarding claim 41, Rappaport discloses a method (see claim 1 rejection) further comprising: pushing distribution system switch configurations to one or more distribution system switches at the site for the wireless local area network, the one or more distribution system switches connecting to the plurality of access points (i.e., the placement of infrastructure equipment may include cables, routers, antennas, switches, access points, and the like, which would be required for a distributed network of components in a physical system. Important information associated with some or all pieces of infrastructure equipment that are modeled by and maintained within the invention using the described database format includes physical location (placement of the equipment within the database so as to site-specifically represent its actual physical placement)) (see paragraph 68).

Regarding claim 42, Rappaport discloses a method (see claim 41 rejection) wherein the distribution system switch configurations include management settings (i.e., the resulting system and method can be used in pre-bid, design, and deployment applications, as well as real time and on-going management and visualization of networks and their performance) (see paragraph 36).

Regarding claim 43, Rappaport discloses a method (see claim 42 rejection) wherein the management settings includes HTTPS settings (i.e., web browsing) (see paragraph 38).

Regarding claim 44, Rappaport discloses a method (see claim 41 rejection) wherein the distribution system switch configurations include IP service settings (i.e., internet protocol addresses) (see paragraph 62).

Regarding claim 45, Rappaport discloses a method (see claim 44 rejection) wherein the IP service settings include: static route settings (i.e., routing) (see paragraph 37).

Regarding claim 46, Rappaport discloses a method (see claim 41 rejection) wherein the distribution system switch configurations include authentication settings (i.e., digital signature) (see paragraph 62).

Regarding claim 47, Rappaport discloses a method (see claim 41 rejection) wherein the distribution system switch configurations include distribution system switch port settings (i.e., equipment settings) (see paragraph 62).

Regarding claim 48, Rappaport discloses a method (see claim 47 rejection) wherein the distribution system switch port settings includes settings for distribution

system switch ports connected to access points of the plurality of access points (see paragraph 60 and 67).

Regarding claim 52, Rappaport discloses a method (see claim 1 rejection) further comprising: pushing access point configurations to one or more access points of the plurality of access points (i.e., the placement and configuration of wireless and wired equipment, such as routers, hubs, switches, cell sites, cables, antennas, distribution networks, receivers, transceivers, transmitters, repeaters, access points, or RF ID tag readers is critical from both a cost and performance standpoint. The design engineer must predict how much interference can be expected from other wireless systems and where it will manifest itself within the environment. In many cases, the wireless network interferes with itself, forcing the designer to carefully analyze many different equipment configurations in order to achieve proper performance) (see paragraph 11).

Regarding claim 55, Rappaport discloses a method (see claim 52 rejection) wherein the access point configurations include encryption settings (i.e., digital signature) (see paragraph 62).

Regarding claim 56, Rappaport discloses a method (see claim 55 rejection) wherein the encryption settings include at least one of: encryption standard settings and encryption key settings (i.e., digital signature, which is defined as information that is encrypted with an entity private key and is appended to a message to assure the recipient of the authenticity and integrity of the message. The digital signature proves that the message was signed by the entity that owns, or has access to, the private key or shared secret symmetric key) (see paragraph 62)

Regarding claim 57, Rappaport discloses a method (see claim 52 rejection) wherein the access point configurations include 802.11 settings (see paragraph 90).

Regarding claim 58, Rappaport discloses a method (see claim 57 rejection) wherein the 802.11 settings include channel number settings (see paragraph 31).

Regarding claim 59, Rappaport discloses a method (see claim 1 rejection) Code (i.e., software application) (see paragraph 39) planning a wireless local area network, comprising: code that performs receiving floor plan data about a site for the wireless local area network (i.e., In order to begin analyzing a communication network, a site-specific computer representation of the environment in which the communication network is or will be deployed is created 101. The present invention uses 2-D or 3-D computer aided design (CAD) renditions of a part of a building, a building, or a collection of buildings and/or surrounding terrain and foliage) (see fig. 1, paragraph 55); code that performs receiving coverage data about the site for the wireless local area network (i.e., the placement of components can be refined and fine-tuned prior to actual implementation of a system or network, wherein performance prediction modeling or measurement may be used for design and deployment; and to ensure that all required regions of the desired service area are blanketed with adequate connectivity, RF coverage, data throughput) (see paragraph 37); code that performs receiving capacity data about the site for the wireless local area network (i.e., the designer may use the invention to perform calculations to predict the performance of the communications network modeled within the environment. Performance is defined by any form of measurable criteria and includes, but is not limited to, adequate connectivity, RF coverage, **data throughput**) (see paragraph 40); and code that performs, based at least on the floor plan data, the coverage data, and

the capacity data, determining quantity, placement, and configuration of a plurality of access points of the wireless local area network (i.e., decisions must be made with respect to the proper location and quantity of access points, and their proper channel assignments) (see paragraph 11).

Regarding claim 60, Rappaport discloses a method (see claim 1 rejection) apparatus planning a wireless local area network (see abstract), comprising: means for receiving floor plan data about a site for the wireless local area network (i.e., In order to begin analyzing a communication network, a site-specific computer representation of the environment in which the communication network is or will be deployed is created 101. The present invention uses 2-D or 3-D computer aided design (CAD) renditions of a part of a building, a building, or a collection of buildings and/or surrounding terrain and foliage) (see fig. 1, paragraph 55); means for receiving coverage data about the site for the wireless local area network (i.e., the placement of components can be refined and fine-tuned prior to actual implementation of a system or network, wherein performance prediction modeling or measurement may be used for design and deployment; and to ensure that all required regions of the desired service area are blanketed with adequate connectivity, RF coverage, data throughput) (see paragraph 37); means for receiving capacity data about the site for the wireless local area network (i.e., the designer may use the invention to perform calculations to predict the performance of the communications network modeled within the environment. Performance is defined by any form of measurable criteria and includes, but is not limited to, adequate connectivity, RF coverage, **data throughput**) (see paragraph 40); and means for, based at least on the floor plan data, the coverage data, and the capacity data, determining quantity, placement,

and configuration of a plurality of access points of the wireless local area network (i.e., decisions must be made with respect to the proper location and quantity of access points, and their proper channel assignments) (see paragraph 11).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rappaport in view of McKenna et al. (McKenna), U.S. Patent No. 6687498.

Rappaport discloses a method as described above (see claim 1 rejection).

Although Rappaport discloses a method wherein the configuration of the plurality of access points of the wireless local area network determined based at least on the floor plan data, the coverage data, and the capacity data (see claim 1 rejection), Rappaport does not specifically disclose a method includes multi-homing for the plurality of access points.

However, McKenna discloses a transceiver, which supports point to multi-point connections.

Therefore, it would have been obvious to one of ordinary skill in the art to combine Rappaport's method with the characteristic, as described, of Mckenna's method to arrive at the claimed invention. A motivation for doing so would have been to provide to the access point the added ability to reduce the chance of access being denied if one

connection fails.

7. Claims 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rappaport in view of Forbes, U.S. Patent No. 6512916.

Rappaport discloses a method as described above (see claim 41 rejection).

Although Rappaport discloses a method as described, Rappaport does not specifically disclose a method wherein the distribution system switch configurations include distribution system switch VLAN settings.

However, Forbes discloses a method, which includes distribution system switch VLAN settings (i.e., VPN services) (see col. 8, lines 60-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings to arrive at the claimed invention. A motivation for doing so would have been to create a system that is based on logical connection.

Regarding claim 50, Rappaport discloses a method, which includes IP address settings IP address settings (i.e., internet protocol addresses) (see paragraph 62).

Regarding claim 51, Rappaport discloses a method as described above (see claim 50 rejection).

Although Rappaport discloses a method as described, Rappaport does not specifically disclose a method wherein the distribution system switch port VLAN settings specify membership of distribution system switch ports in VLANs.

However, Forbes discloses a method wherein VPN setting specify membership of distribution system switch ports in VPAN (as understood by examiner) (VPN services

includes wide area network services, firewall services, and dedicated Internet access support) (see col. 8, lines 60-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings to arrive at the claimed invention. A motivation for doing so would have been to create a system that is based on logical connection.

8. Claims 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rappaport in view of Agrawal et al. (Agrawal), U.S. Patent No. 6879812.

Regarding claim 53, Rappaport discloses a method as described above (see claim 50 rejection).

Although Rappaport discloses a method as described, Rappaport does not specifically disclose a method wherein the access point configurations include SSID settings.

However, Agrawal discloses a method wherein the access point configurations include SSID settings (i.e., To differentiate the subnetworks or particular networks, each particular subnetwork or network may have an identification associated with it. In this case, the communications for one network will be ignored by those devices associated with another network based, at least in part, by this identification associated with the transmissions of data. In the case of an 802.11 protocol, this is accomplished by an Extended Service Set Identifier (ESSID), which identifies the wireless local area network (LAN)) (see col. 9, lines 20-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both teachings to arrive at the claimed invention. A motivation for doing so would have to provide an open wireless network.

Regarding claim 54, Rappaport discloses a method as described above (see claim 53 rejection).

Although Rappaport discloses a method as described, Rappaport does not specifically disclose a method wherein the SSID settings include at least one of: beaconed SSID settings, encrypted data SSID settings, and unencrypted data SSID settings.

However, Agrawal discloses a method wherein the SSID settings include beaconed SSID settings (i.e., identification associated with the transmission of data) (see col. 9, lines 20-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both teachings to arrive at the claimed invention. A motivation for doing so would have to provide an open wireless network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is 703-605-4312. The examiner can normally be reached on (571) 272-7799.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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07/25/2005

JEAN GELIN
PRIMARY EXAMINER